

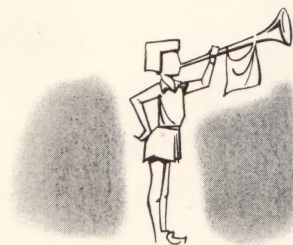
**THE SPECTACULAR**  
**NEW**  
**HYDRA-MATIC**  
**DRIVE**











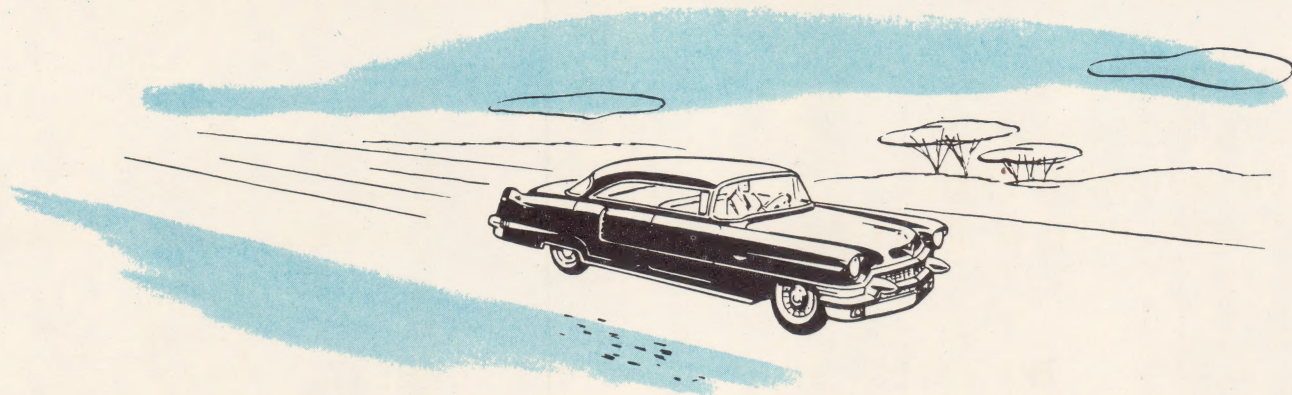
## THE LATEST ENGINEERING DEVELOPMENT FROM THE PIONEERS OF THE AUTOMATIC TRANSMISSION

The newest, greatest Hydra-Matic transmission is the culmination of years of engineering research. Like the original Hydra-Matic and its successors from the Detroit Transmission Division of General Motors, this remarkable new model has been completely tried and proven by millions of miles of grueling test driving.

The new Hydra-Matic transmission stems from a research project that is actually many years old. A project for the development of a practical, automatic transmission resulted in the founding of the Detroit Transmission Division in 1939. In this year the first Hydra-Matic transmission was shipped to the Oldsmobile Division.

Since its introduction to the driving public in 1939, Hydra-Matic has had a most impressive record of advancement and acceptance. And the important reason behind this success is this: **THE PEOPLE WHO MAKE THIS HYDRA-MATIC TRANSMISSION.**

Detroit Transmission Division that produces Hydra-Matic is a comparatively young enterprise—the millions of Hydra-Matic transmissions built since 1939, however, are ample proof of the technical ingenuity and manufacturing ability of the THOUSANDS of SPECIALISTS at Detroit Transmission Division.



## HYDRA-MATIC ENGINEERED SPECIFICALLY FOR *SMOOTHER* DRIVING

Hydra-Matic transmission engineers have designed this new automatic transmission for amazingly smooth performance behind today's engines with their greater output of power.

A New Experience .....	Page 3	Now 2 Couplings .....	Page 7
New Safety .....	Page 4	New Freedom from Service .....	Page 8
New Economy .....	Page 5	Most Enjoyment .....	Page 9-11
Secret of Smoother Power .....	Page 6	Smoothest Performance .....	Page 12



## A NEW EXPERIENCE IN SMOOTH PERFORMANCE! A NEW MOTORING THRILL FOR EVERY TYPE OF DRIVER!

With the great new Hydra-Matic you enjoy the smoothest getaway ever—because engine power flows through a double cushion of oil. The torque changes, exclusively yours in this Hydra-Matic, are there to give you a really exhilarating burst of power. The response to the accelerator is *instant*—you take off in one continuous surge of speed. Positive power is always at your command with the new Hydra-Matic, at any speed or under any driving condition.

At your fingertips is exactly the driving range to suit the situation.

**The new Hydra-Matic smoothly and quietly selects just the right gear for you to meet *every* kind of motoring need. Regardless of speed you sweep along with delightful quiet and freedom from vibration.**

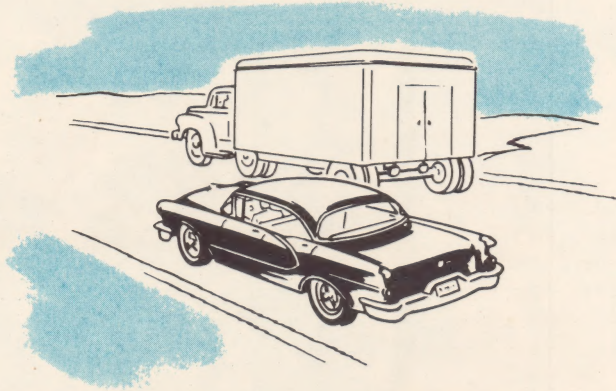
Even at lowest speeds engine torque is cushioned through oil. And slowing down is smoother with this Hydra-Matic because automatic downshifting is also cushioned by oil.



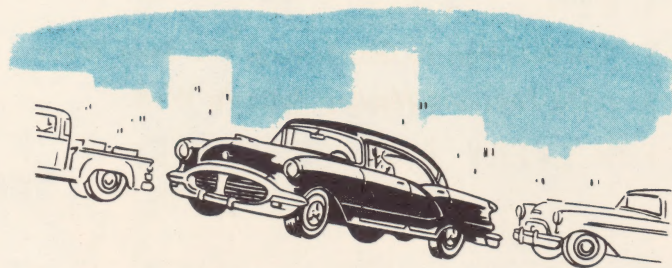
## NEW SAFETY FOR YOU AND YOUR FAMILY . . .

### *New Performance Features Offer Greater Driving Security In Any Situation*

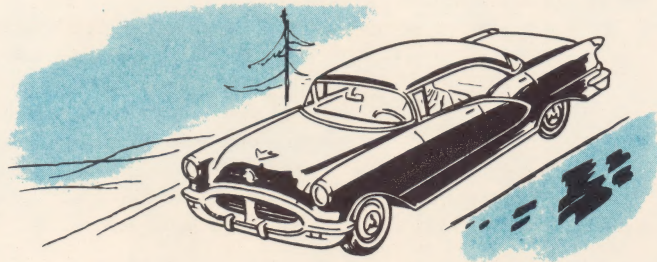
You *feel* safer driving with this new Hydra-Matic—and you *are* safer—because it was planned that way. Passing-safety demands a minimum of time spent in the oncoming traffic lane. With the



famous Hydra-Matic downshift, you are safe all the way. Pushing the accelerator to the floor will instantly give you the powerful surge of the next lower gear—and you're around the car ahead in the time it takes to tell it.



Getting away from a parked position on a hill is easier, too. Now you simply start the engine with the selector in **Park** position, slip smoothly into **Drive 4**, and go.

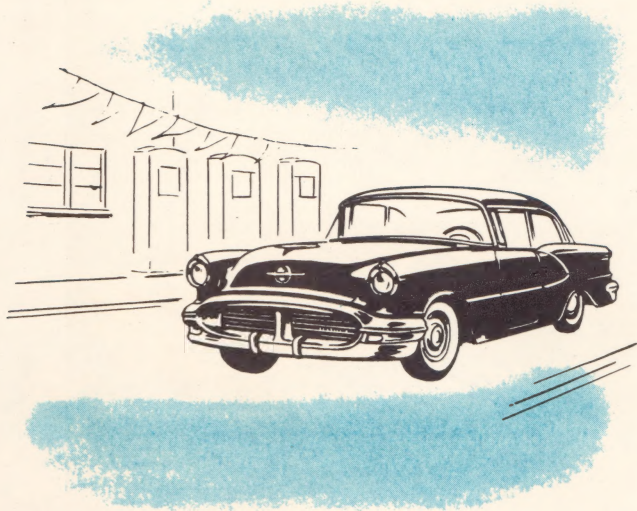


Descending steep grades also becomes safer with the positive braking action of the engine, through **Drive 3** and **Low** range gear selection.



## NEW SPECTACULAR HYDRA-MATIC ASSURES ECONOMY

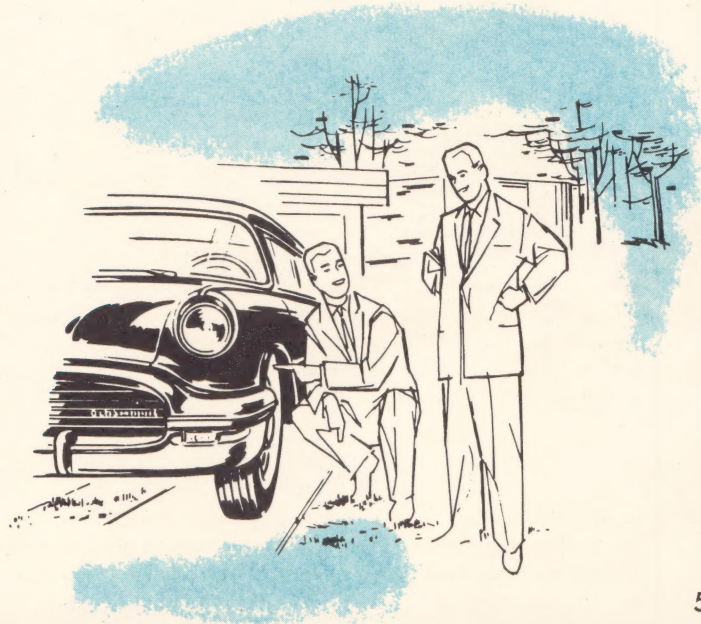
*In Addition To Gas Saving, You Save Wear  
On Tires and Moving Parts As Well*



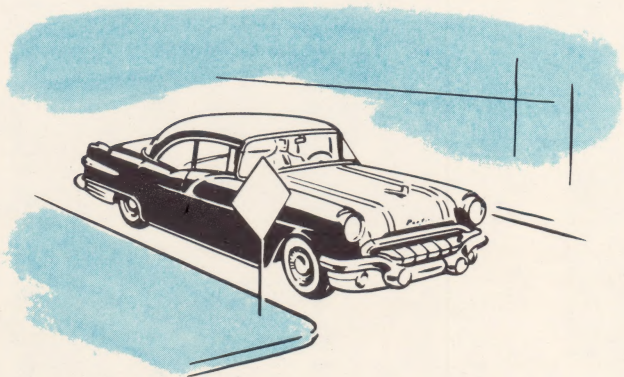
With the new Hydra-Matic you enjoy the special economies possible with this great automatic transmission. Hydra-Matic shifts quickly into fourth gear, or direct drive—where most economical perform-

ance is possible. Fourth gear reduces engine revolutions—helps you go farther on less gasoline.

Hydra-Matic also insures smoother stops and starts, reducing shock, strain and wear on mechanical parts and increasing tire life.



## THE SECRET OF SMOOTH POWER—

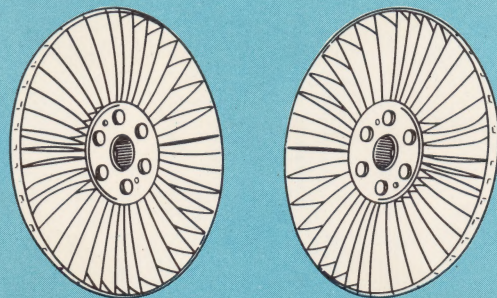


Remember the old mechanical brakes on the cars back in the late 20's and early 30's? . . . Remember the whole car often would shudder and shake when you slammed them on? Today, of course, braking power is transmitted through the fluid of the hydraulic braking system—smoothly and gradually.

*These two torus members make up a fluid coupling filled with oil through which power is transmitted very smoothly.*

### *Transmitting Energy Through a Cushion of Oil*

To appreciate the operation of the Hydra-Matic fluid coupling, visualize two units called torus members which look like half-grapefruit. Substitute oil for the air in between. The front torus is connected to the flywheel of the engine and turns as the engine turns. Power is transmitted through whirling oil to the other torus member which is connected to the rear wheels through the transmission. But the new super smooth Hydra-Matic goes one step further . . .



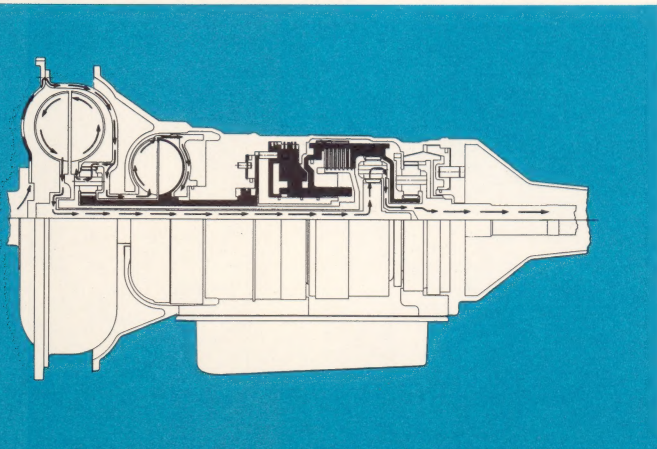


## THE NEW HYDRA-MATIC USES

# 2

## FLUID COUPLINGS

*This Remarkable New Engineering Development  
Assures the Smoothest Power and Performance  
On the Market . . .*



The new Hydra-Matic features a *second fluid coupling* which is hydraulically controlled.

During the initial power application in first gear, this smaller coupling is empty of oil and the power flows through the front unit gear set.

In the shift to second gear, the smaller coupling fills with oil and transmits engine torque directly to the rear unit gear-set, smoothly and automatically.

In the shift from second to third, the rear unit is in direct drive and the small coupling empties, allowing front unit reduction only.

For fourth gear or direct drive the smaller coupling again fills with oil and power is applied in direct drive from engine to rear axle.

This transmission of power is applied in one continuous surge of smooth, quiet performance with no effort on the part of the driver, except to press the accelerator.

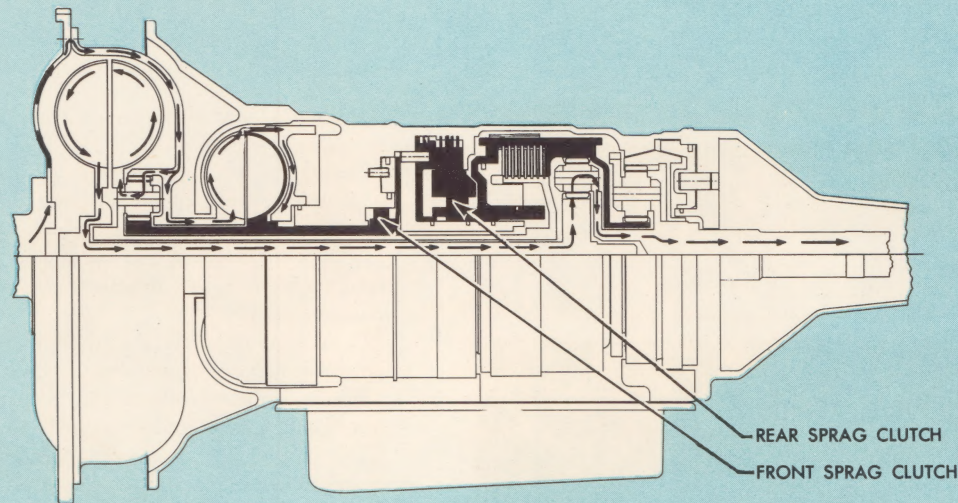
*The illustration shows the flow of power when the new Hydra-Matic is in first speed, with the controlled coupling empty.*



# new

## FREEDOM FROM MAINTENANCE

*Hydra-Matic Drops Upkeep Way Down*



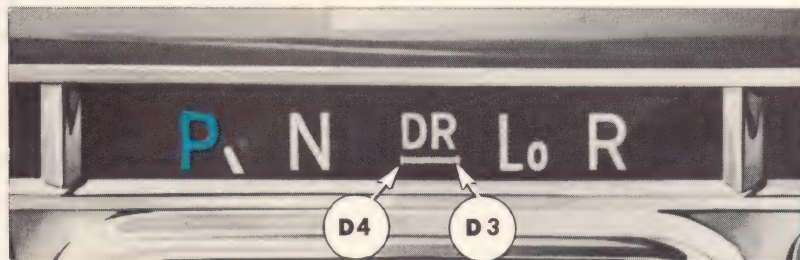
The new Hydra-Matic unit is adjusted at the factory. The need for any further adjustment in the transmission has been eliminated through improved design and engineering advancements.

Sprag clutch assemblies are now utilized in place of holding bands formerly used. With the elimination of holding bands and

the substitution of a fluid coupling for a clutch in the front unit, sensationally trouble-free performance has been obtained. The only maintenance that is necessary is the normal change of transmission fluid at regular recommended intervals.



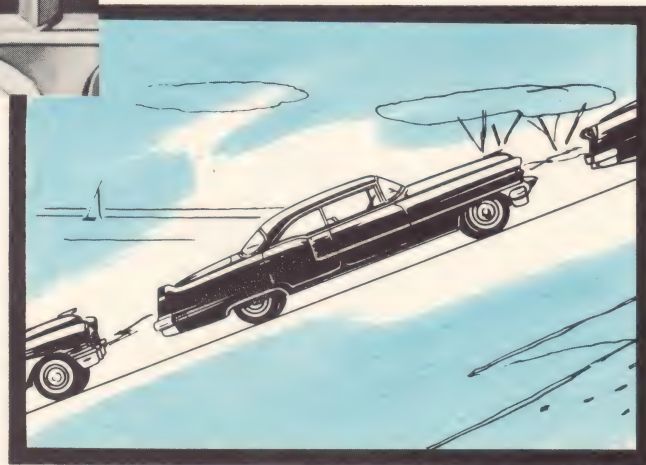
## NEW PARK POSITION HELPS YOU GET MORE SAFETY AND ENJOYMENT FROM HYDRA-MATIC



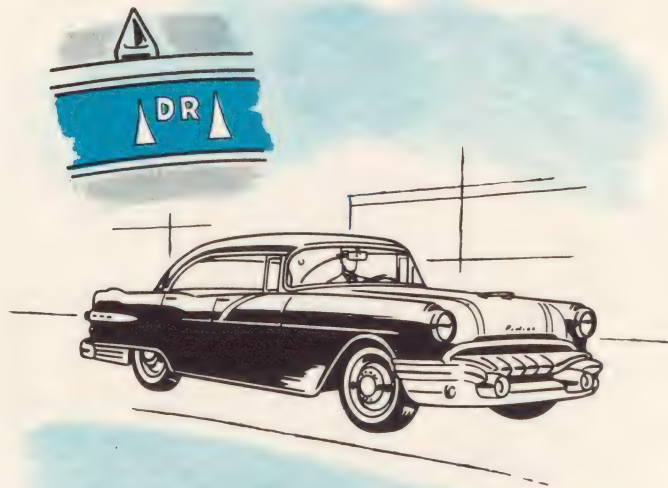
The shift selector dial of the new Hydra-Matic shows the positions in block initials: **P**ark, **N**eutral, **D**rive 4, **D**rive 3, **L**ow and **R**everse. (As a safety feature, the engine cannot be started except in **P**ark and **N**eutral.)

**P**ark locks the transmission and keeps the car from rolling when parked on an incline. However, as **P**ark position acts instantly when applied, never shift into this position when the car is in motion.

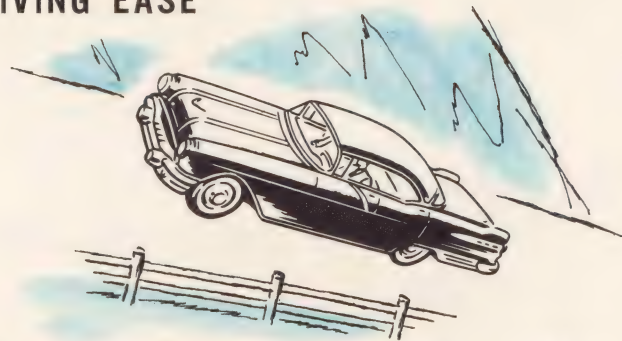
The engine may be started in the **P**ark position, even on steep slopes. When you are ready to move off merely slip into **D**rive 4 position and pull away safely and surely.



## A NEW TYPE OF DRIVING EASE



Drive 4 is the selector position for normal driving. In this position the transmission will automatically shift into 4th gear rapidly, for maximum economy. With the new Hydra-Matic you enjoy the greatest range of power you have ever experienced.



For example, in **Drive 4** position when ascending a steep hill, increased throttle pressure will automatically downshift the transmission to 3rd gear. When the hill has been breasted you will return to 4th gear, automatically.



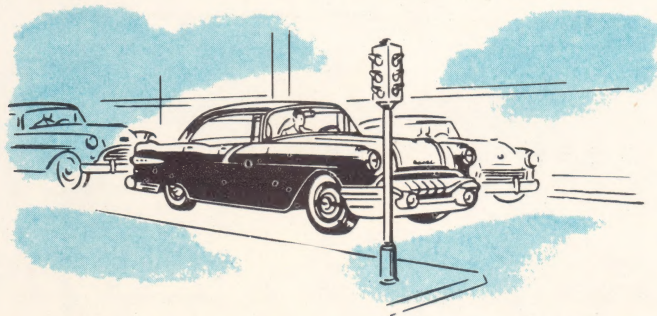
Neutral position disconnects drive shaft and engine and allows the car to roll freely. If necessary to push the car to start the engine, the lever should be left in the **Neutral** position until a car speed of approximately 25 miles an hour has been reached—then with the ignition turned on, the lever should be moved to the **Drive 4** position.



## MAKES ALL DRIVING A PLEASURE

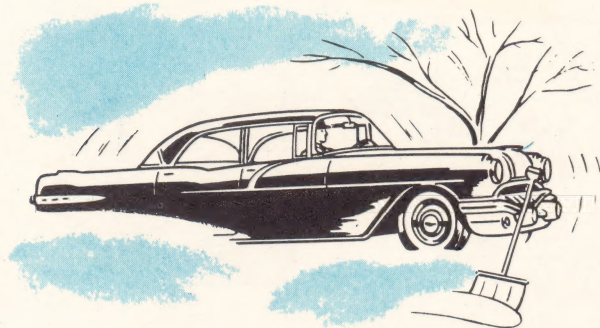


In **Drive 3** range the transmission starts in first gear and shifts to second and third. However, it remains in third gear until approxi-



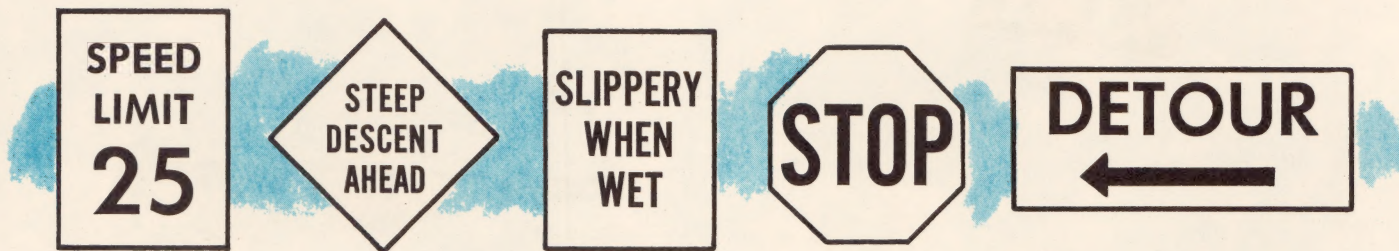
mately 74 MPH before shifting to fourth. A warning detent "feel" on the accelerator pedal makes it possible for driver to downshift or not as desired. **Drive 3** provides additional acceleration for traffic or extra power for hills.

**Low range** position prevents the transmission from shifting out of second. It remains in **Low Range** until approximately 45 M.P.H. before shifting to third. This is extremely useful in heavy going and also provides maximum engine braking action on steep downgrades.



**Reverse** backs up your car and is placed next to low on the selector so you can easily make use of these two ranges to rock the car out of mud or snow.

**YOU GET THE SMOOTHEST PERFORMANCE UNDER  
ALL CONDITIONS WITH THIS NEW HYDRA-MATIC**



This new automatic transmission delivers the smoothest performance ever achieved by a Hydra-Matic—under all driving conditions. This advanced, highly efficient unit lets you enjoy every advantage made possible by the higher power and torque of modern engines.

Moreover, the new Hydra-Matic makes better driving easier with its remarkable smoothness and its automatic selection of the right gear ratio for every need. Smooth, quiet operation and

safer car control mean a more pleasant, relaxed ride for driver and passengers alike.

The new Hydra-Matic makes any driver a better driver with its amazing ability to meet any situation, automatically. Hydra-Matic literally thinks for you and keeps your car in the right gear at all times. Fast or slow, stop or go, you're always in complete command—automatically.





